

*Amendments to the Claims*

This listing of claims will replace all prior versions and listings of claims in the application and annexes to the International Preliminary Examination Report.

1. (Currently Amended) A composition for enhancing an immune response in an animal comprising:
  - (a) a virus-like particle;
  - (b) an immunostimulatory nucleic acid;wherein said immunostimulatory nucleic acid (b) is packaged within ~~is bound to~~ said virus-like particle (a);
  - (c) at least one antigen, wherein said antigen is mixed with or coupled to said virus-like particle (a); and
  - (d) at least one toll-like receptor (TLR) ligand;wherein said immunostimulatory nucleic acid (b) activates a TLR that is different than the TLR activated by the ligand (d).
2. (Original) The composition of claim 1, wherein said TLR ligand (d) is mixed with said VLP.
- 3-4. (Cancelled)
5. (Currently Amended) The composition of ~~any one of the preceding claims~~ claim 1, wherein said ligand (d) is a ligand for TLR 4.
- 6-9. (Cancelled)

10. (Currently Amended) The composition of ~~any one of claims 1 to 7 and claim 9~~  
claim 1, wherein said immunostimulatory nucleic acid is an unmethylated CpG-  
containing oligonucleotide.
- 11-13. (Cancelled)
14. (Currently Amended) The composition of claim 10, wherein the CpG motif of said  
unmethylated CpG-containing oligonucleotide is part of a palindromic sequence.
15. (Original) The composition of claim 5, wherein said palindromic sequence is  
GACGATCGTC (SEQ ID NO: 39).
16. (Currently Amended) The composition of claim 10, wherein said unmethylated  
CpG-containing oligonucleotide comprises, ~~or alternatively consists essentially of,~~  
~~or alternatively consists of~~ the sequence GGG GGG GGG GGA CGA TCG TCG  
GGG GGG GGG (SEQ ID NO: 54).
- 17-32. (Cancelled)
33. (Currently Amended) The composition of ~~any of the preceding claims~~ claim 1,  
wherein said immunostimulatory nucleic acid (b) is an unmethylated CpG-  
containing oligonucleotide and wherein said ligand (d) is a ligand for TLR 1, 2, 3,  
4, 5, 6, 7, 8, 10 or 11.
34. (Currently Amended) The composition of ~~any of the preceding claims~~ claim 33,  
wherein said immunostimulatory nucleic acid (b) is an unmethylated CpG-  
containing oligonucleotide and wherein said ligand (d) is a ligand for TLR4.
- 35-40. (Cancelled)

41. (Currently Amended) The composition of ~~any one of claims 1 to 38~~ claim 1, wherein said virus-like particle comprises recombinant proteins, or fragments thereof, of a RNA-phage, wherein said RNA-phage is bacteriophage Q $\beta$  or bacteriophage AP205.

42-46. (Cancelled)

47. (Currently Amended) The composition of ~~claim 46~~, claim 1, wherein said antigen (c) is isolated from a natural source, wherein said natural source is selected from the group consisting of:

- (a) pollen extract;
- (b) dust extract;
- (c) dust mite extract;
- (d) fungal extract;
- (e) mammalian epidermal extract;
- (f) feather extract;
- (g) insect extract;
- (h) food extract,
- (i) hair extract;
- (j) saliva extract; and
- (k) serum extract.

48. (Currently Amended) The composition of ~~any one of claims 1 to 44~~ claim 1, wherein said antigen (c) is derived from the group consisting of:

- (a) viruses;
- (b) bacteria;
- (c) parasites;
- (d) prions;
- (e) tumors;
- (f) self-molecules;

- (g) non-peptidic hapten molecules;
- (h) allergens; and
- (i) hormones.

49. (Cancelled)

50. (Currently Amended) The composition of ~~claim 49~~ claim 1, wherein said antigen (c) is a tumor antigen, wherein said tumor antigen is selected from the group consisting of:

- (a) Her2;
- (b) GD2;
- (c) EGF-R;
- (d) CEA;
- (e) CD52;
- (f) human melanoma protein gp100;
- (g) human melanoma protein melan-A/MART-1;
- (h) tyrosinase;
- (i) NA17-A nt protein;
- (j) MAGE-3 protein;
- (k) p53 protein;
- (l) HPV16 E7 protein;
- (m) an analogue of any one of the antigens from (a) to (l); and
- (n) antigenic fragments of any one of the tumor antigens from (a) to (m).

51. (Cancelled)

52. (Currently Amended) The composition of ~~claim 51~~ claim 1, wherein said antigen (c) is an allergen, wherein said allergen is derived from the group consisting of:

- (a) pollen extract;
- (b) dust extract;

- (c) dust mite extract;
- (d) fungal extract;
- (e) mammalian epidermal extract;
- (f) feather extract;
- (g) insect extract;
- (h) food extract;
- (i) hair extract;
- (j) saliva extract; and
- (k) serum extract.

53. (Currently Amended) The composition of ~~claim 51~~ claim 1, wherein said antigen (c) is an allergen, wherein said allergen is selected from the group consisting of:

- (a) trees;
- (b) grasses;
- (c) house dust;
- (d) house dust mite;
- (e) aspergillus;
- (f) animal hair;
- (g) animal feather;
- (h) bee venom;
- (i) animal products; and
- (j) plant products.

54. (Currently Amended) The composition of ~~any one of claims 1 to 44~~ claim 1, wherein said antigen (c) is selected from the group consisting of:

- (a) bee venom phospholipase A<sub>2</sub>;
- (b) ragweed pollen Amb a 1;
- (c) birch pollen Bet v I;
- (d) white faced hornet venom 5 Dol m V;
- (e) house dust mite Der p 1;

- (f) house dust mite Der f 2;
  - (g) house dust mite Der 2;
  - (h) dust mite Lep d;
  - (i) fungus allergen Alt a 1;
  - (j) fungus allergen Asp f 1;
  - (k) fungus allergen Asp f 16; and
  - (l) peanut allergens.
55. (Currently Amended) The composition of ~~any one of claims 1 to 44~~ claim 1, wherein said antigen (c) is a cytotoxic T cell epitope, a Th cell epitope or a combination of at least two of said epitopes, wherein said at least two epitopes are bound directly or by way of a linking sequence.
56. (Cancelled)
57. (Currently Amended) A method for enhancing an immune response in an animal comprising introducing into said animal a composition comprising a composition of ~~any one of claims 1 to 56~~ claim 1.
- 58-62. (Cancelled)
63. (Currently Amended) A method ~~Use of a composition according to any of claims 1 to 56 or use of a vaccine according to claim 60 in the manufacture of a pharmaceutical~~ for the treatment of a disorder or disease ~~comprising, and preferably selected from the group consisting of, allergies, tumors, chronic diseases and chronic viral diseases,~~ the method comprising introducing into said animal a composition of claim 1.[.]
64. (New) The composition of claim 34, wherein said ligand (d) is LPS or a derivative thereof.